



Terry Tamminen
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov



Arnold Schwarzenegger
Governor

November 24, 2003

#03-12a

Andrea Ticci
SMARTFLEX Product Manager
NUPI S.p.A.
Via Colombarotto, 58
I-40026 Imola (BO)
Italy

Dear Mr. Ticci:

On April 30, 2002, you requested California Air Resources Board (ARB) certification for NUPI's *UL/ULC Listed SMARTFLEX®* semi-rigid pipe and fittings for use in *Vapor Recovery Piping* applications, utilizing underground storage tanks and buried vapor return piping. The *SMARTFLEX* pipe submitted for ARB testing was: *TSMA* - single wall pipe and *TSMAD* - double wall, in straight lengths.

The NUPI - *SMARTFLEX* pipe system consists of a high-density polyethylene (HDPE) pipe with an internal organic alloy barrier lining, which reduces hydrocarbon permeation through the pipe. *SMARTFLEX* fittings (single and double wall) are also manufactured from HDPE organic alloy materials as well. The pipes and fittings are connected by electro-fusion welded joints and have full secondary containment – when *SMARTFLEX* double wall fittings are utilized. **Note: Only the NUPI - *SMARTFLEX* semi-rigid piping that comes in straight lengths has been evaluated for use as vapor return piping.**

Pursuant to sections 41955 and 41957 of the California Health and Safety Code, the approvals of three state agencies are a precondition to certification by the ARB. We have received the appropriate approval letters and have listed them below.

- Department of Food and Agriculture
Division of Measurement Standards
September 2, 2003
- Department of Industrial Relations
Division of Occupational Safety and Health
October 30, 2002
- Office of the State Fire Marshal
Department of Forestry and Fire Protection
January 28, 2003

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

As required by the Vapor Recovery Certification Procedure, CP-201, the NUPI - *SMARTFLEX* pipe system shall be installed in accordance with Section 4.12 for vapor return piping. This applies to piping used for vapor return paths from the dispenser riser to the USTs and from the vapor vent stack riser to the USTs at gasoline dispensing facilities (GDFs).

The following list includes additional requirements and recommendations for installation of the NUPI - *SMARTFLEX* pipe system:

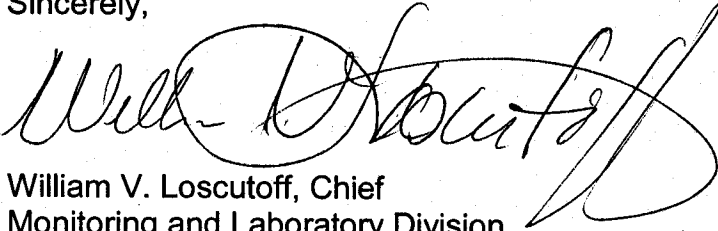
- USTs shall be manifolded together underground.
- Piping used for vapor piping shall be from straight pipe sections with a bend radius not to exceed the limits set forth in CP-201. No piping sold or transported in rolls (coils) shall be used.
- Inspection and verification of proper slope are recommended after final grade of the pipe bedding has been established and prior to back-filling piping trenches. Bedding material (pea gravel or like) should be brought up to at least 50 percent and no more than 90 percent of pipe diameter prior to inspection.
- Back-pressure and liquid blockage testing of the vapor return piping from the dispensers to the USTs are recommended after final grade of vapor return pipe bedding has been established and prior to back-filling.
- Back-pressure and liquid blockage testing are recommended once final grade of station has been established and all finished surfaces applied.
- Back-pressure and liquid blockage testing of the NUPI - *SMARTFLEX* pipe system at GDFs are recommended to be performed annually.

The NUPI - *SMARTFLEX* pipe system meets the bend radius criteria set forth in TP-201.2G. The NUPI - *SMARTFLEX* pipe system, when installed in accordance with the manufacturer's instructions and the requirements and recommendations listed above, will not adversely affect the performance of a Phase II vapor recovery system utilizing USTs and buried vapor return piping. *Therefore the NUPI SMARTFLEX semi-rigid piping system (single and double wall) is approved for use in Phase II vapor recovery applications.*

Mr. Andrea Ticci
November 24, 2003
Page 3

If you have questions or need further assistance, please contact Ranjit Bhullar at (916) 322-0223 or via email at rbhullar@arb.ca.gov, or Paul Thalken at (916) 445-9499 or via email at pthalken@arb.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Will Loscutoff", with a large, stylized loop at the end.

William V. Loscutoff, Chief
Monitoring and Laboratory Division

cc: Dan Wendt, Regional Manager (US/Canada)
NUPI Americas, Inc.
2460 Skyview Circle
Fairfield, CA 94534

Lou Roberto, CAPCOA Chair
South Coast AQMD

Ben Shaw
South Coast AQMD

Scott Bacon
State Water Resources Control Board